

ABSTRACT

A method for measuring blood pressure and pulse rate with a pump-less mechanical compression apparatus, wherein the pump-less mechanical compression apparatus comprises a compression assembly with a closed system air bag having a fixed air volume fastened on the human body measuring site; a sensor coupled to the air bag for sensing pressure change inside the air bag; a processor for processing the pressure change; and a display. Through the use of the mechanical compression assembly, the pressure inside the air bag can be increased and steadily released to achieve the same measuring effects as traditional sphygmomanometer/sphygmometer. The apparatus invention also comprises a deactivation assembly and an alarm for safety purpose.